Lesson 97 - Devising A Lifestyle That Includes Vigorous Activity

- 1. Introduction
- 2. Informal Exercise
- 3. Formal Exercise
- 4. Questions & Answers
- Article #1: Exercise: A Hygienic Perspective By Ralph C. Cinque, D.C.
- Article #2: Exercise: What Most Of Us Forget
- Article #3: Jogging And Other Vigorous Exercise
- Article #4: Hiking Is More Than Just Exercise By Marti Wheeler
- Article #5: Developing Your Arms

1. Introduction

"I'm too busy to eat."

"Sleep? Who has time for that?"

"I try to take a bath or shower on the weekends. I've got too much work to do during the rest of the week."

You won't hear people talk like this. Eating, sleeping, and bathing are all part of the normal person's daily lifestyle. Yet 63% of all Americans do not take part in another regular activity that's just as vital to our well-being and health—exercising!

Exercise is not a daily part of most people's lives. And that's very strange, especially when you consider that over 90% of all adults agree that proper diet and regular exercising would do more to improve health than anything that physicians or medicines could do for us (or to us).

Why isn't exercising more popular? Well for one thing, exercise requires some hard work, a little time, and a good measure of self-discipline. You have to make room in your life for exercise and vigorous activity.

Once you put daily exercise into your life, the rest is easy. The difficult part is to first devise a lifestyle that includes vigorous activity. That is what this lesson is all about—how to develop a lifestyle for yourself or for your clients that includes regular exercise and daily vigorous activity.

1.1 What Is Vigorous Activity?

Almost everybody is active throughout the day. Performing our normal chores, doing our work and running errands, even simply sitting and reading requires a certain level of activity. Even in sleep, the body is still active, tossing and turning, using up to 60 calories per hour in this reduced metabolism.

Yet *vigorous* activity is needed by our lungs, our circulatory system, our muscles and nerves for optimum health. Otherwise, we become sluggish. Bodily functions are impaired, the health of the organs deteriorates, and we suffer from poor sleep, digestive problems, constipation, and poor posture.

Vigorous activity is different from normal activity in that it makes our entire body work, strive, grow, and vibrate. It makes our breath quicken, our pulse race, and our heart pound. In short, it makes us feel alive.

1.2 Is Exercise Unnatural?

Thousands of years ago, there was no such thing as "exercise" or calisthenics or daily workouts. Life for primitive man was one of continual vigorous activity. He climbed trees for fruit, migrated 25 to 50 miles per day during the seasonal changes, and did a fair share of sprinting, running, and swimming just to avoid wild animals and his enemies.

Daily life was full of "exercising" for our ancestors, and their bodies remained supple, lean, and strong from just responding to the constant demands of survival and living out in the open twenty-four hours a day.

So you see, exercise is unnatural. If man himself led a purely natural life, unfettered by the demands of civilization, he would receive a full range of vigorous activity that would keep the body in superior health. However, almost no one on this planet today has such a pristine existence. We sleep in buildings at night, "gather" our foods from supermarket bins, and ride in an automobile to a job that requires us to sit at a desk for most of our waking hours.

As Dr. Herbert M. Shelton has observed, "Some people often urge that the normal activities of life should supply all the exercise needed after maturity is reached. The reply is that the activities of civilized life are not normal."

Still, many people scoff at the idea that they might need daily periods of vigorous activity. They still see exercise or jogging or weight-lifting as something artificial, unnatural, or abnormal. The real reason for their mistrust of exercise may be far simpler, however.

"It is often contended," writes Dr. Shelton, "that formal exercises are unnatural or abnormal, hence, of no benefit. But there is no difference between the contraction of a muscle in formal exercise and its contraction in what we may designate as primitive activities of life. There is no such thing as artificial contraction of a muscle. No exercise using spontaneous movements, whether in primitive activities or formal exercise, can be called artificial or unnatural. The objection to exercise seems to be the expression of that laziness that stems from a lack of vigor, the very vigor that exercise provides for."

Still, people resist the idea of devising a lifestyle that includes vigorous activity. As you deal with your clients and friends, you may hear an all-too common excuse: "I don't need to exercise because my job or my daily work provides me with all the activity I need."

2. Informal Exercise

2.1 Work Isn't Exercise!

Exercising may be hard work, but hard work isn't exercise.

A common mistaken belief is that if you perform hard work or heavy labor at your job, then you don't really need to exercise during your nonworking hours. I remember talking to a city employee who repaired streets with a pneumatic drill or "jackhammer" all day long.

The man's forearms were immense knotted muscles that had been developed through years of holding a heavy jackhammer in place to rip up old asphalt pavement. His wrists were powerful and he had a grip that made handshakes a must to avoid.

Yet when you looked past his arms, you saw a sagging potbelly, spindly legs, and stooped shoulders. His

complexion was a dirty yellow, his eyes dulled, and his hearing almost gone from years of hammering at the pavement. Had his daily work kept him in good shape? Only the arms!

The sad fact is that most work performed today is not adequate, all-around exercise. "There are no less than 400 muscles in the body, each in need of regular exercise," writes Dr. Herbert M. Shelton. "The belief that the ordinary activities of life provide adequate exercise for the muscles of the body is a blind one. Anyone may readily see this for himself when he examines the limited extent to which his muscular system is used in his daily activities. Even in the man who performs manual labor, many muscles are neglected. Modern specialization, both in work and in play or athletics, neglects many muscles."

The busy mother and housewife who picks up dirty clothes and toys, straightens closets, and puts away dishes may be doing plenty of hard work, but very little significant exercise. Even a manual laborer such as a groundskeeper who mows, rakes, and trims yards for eight hours each day uses only a limited set of muscles.

Most work in the modern world, because of its highly repetitive, specialized and limited nature, cannot supply the full range of muscular activity that is required for beneficial exercise. This is one reason why people find work and their jobs so tiring.

"Modern man," observes Dr. Shelton, "spends most of his working hours using but limited parts of his muscular system in specialized activities, and often using these only slightly, and so becomes but a caricature of a man. He is undeveloped, one-sidedly developed, and almost always lacking in vigor."

Exercise actually increases our vigor. Energy expended during proper exercise is quickly returned following rest and relaxation. Not only that, but a half-hour of intense and concentrated exercising can accomplish more conditioning than a full day of hard manual work.

In contrasting the benefits of selective exercising versus most daily labor, Dr. Shelton notes: "Greater strength and development and more symmetrical development may be obtained by appropriate exercise than by most forms of physical work. Actual tests have shown, for instance, that a few minutes of proper exercise daily will produce a greater increase in the size of the arms, legs, back or chest in a given time than work will do."

2.2 But Don't Stop Working!

Although more can be gained in an hour of structured and regular exercise than can usually be obtained from a day of regular work, we can still use our jobs as a form of beneficial exercise. After all, we spend the greater portions of our lives involved in some sort of productive labor. By using our imagination and becoming more creative, we can turn our regular daily jobs into mini-exercise periods all through the day.

Perhaps one of the most effective ways to devise a lifestyle that includes vigorous activity is to incorporate exercising into your daily job. This method is appealing because it doesn't take up much extra time. Since you're already working, you might as well be getting some form of vigorous activity. Let's look at a few case histories of people who have put the "exercise" back into their "work".

2.3 Rub-adub-tub: Exercise in the Bathroom

One group of people who need to exercise the most are those that seem to have the least time: young mothers and busy housewives. "Exercise?! After changing diapers, scrubbing floors, and cleaning out the garage. Just give me rest, thank you," said a young woman of three pre-school children.

Ann Dugan, a 55-year-old grandmother, however, disagrees. "You have to clean up the bathroom every day, and if you have to do it, you might as well make it productive," said Dugan, author of 12 books on exercise and weight training. She developed a series of "at-home" exercise that housewives can do while getting the necessary housework out of the way.

"You might as well toughen up your body while you're toughening up the bathroom," said Dugan, who also emphasized that her exercises can be done in homes, offices, cars, and airplanes. "With all the bending and stretching needed to get to high shelves, inside cabinets, and under furniture, it's easy to turn those movements into a tough workout."

For example, Dugan suggests that when you clean your bathtub, instead of getting down on both hands and knees, you can kneel on the right knee only and clean the tub with the right hand. This position causes the pectoral muscles to be used and the hamstrings to be stretched. By reversing the knees, you can achieve an equalizing stretch while giving the shoulder and chest muscles a workout.

Even cleaning a toilet bowl can turn into a beneficial exercise by using Dugan's "dip-and-disinfect" method. The cleaner stands, facing the toilet bowl, with legs bent so that the hips are low. The thighs should be parallel to the floor, with the left hand braced on the water tank as you scrub with the right hand. During this scrubbing process, you should raise and lower the heels at least ten times. This modified form of the "squat" exercise is the same one that is used by weightlifters to develop their lower bodies and reduce fat around the thighs.

Of course such intermittent exercising while doing housework cannot take the place of sustained and vigorous activity. Yet the extra bending, stretching, and flexing that may be done while at a regular job can help keep the body supple and ready for more intense physical activity later in the day or during the weekend leisure time.

2.4 Office Calisthenics

Some jobs, such as yard work, carpentry, construction, and farming, provide many opportunities for incorporating vigorous activity programs throughout the day. The construction worker may simply carry heavier and heavier loads while on the job to develop his musculature, while the farmer or gardener can take a shovel and hoe for an added hour of a combined exercise and work "workout."

Even the deskbound office worker can add activities to his daily job routine that will sneak in valuable minutes of vigorous activity. Here's how one Life Scientist got an hour's worth of jogging in without ever leaving his office building!

"I worked on the sixth floor in a large office complex, and was behind a desk all day. My thinking became dulled and fuzzy from just all the inactivity. By the end of the day, I was so fatigued from the unnatural environment that I just couldn't drag myself out to a track where I could run in the evenings. Then one day I read that climbing stairs actually gave more of a cardiovascular workout than jogging for the same amount of time.

"I rarely ate lunch while at work, since I was sitting most of the day, so I decided to get some on-site exercising done. Like other large buildings, my office had hidden flights of stairs for a fire escape.

Almost everybody rode the elevators, leaving the stairways unused. That day I walked down to the bottom of six flights of stairs, and then ran to the top. Walked down, and then ran to the top again. After twenty minutes of this running upstairs, I was breathing very heavily and my heart was pounding in my ears. I knew I was on to something good.

"Now everyday I'm out running up and down the stairs, sometimes three times a day in order to break up all the inactivity at my desk. I feel that I think much better after a period of stair-running. My only fear is that someday my co-workers will see me and think I'm running down the stairs because the building is on fire!"

Almost any job can be arranged so that small periods of vigorous activity can be performed. This is the easiest way and the first way that some people work exercise back into their daily routines.

So remember, while work may not be exercise, you can put the vigor back into work by slipping in some exercise periods of your own.

2.5 Daily Life As Exercise

Besides the working hours, our lives provide us with many other opportunities for including vigorous activity periods.

Gardening, lawn work, planting and harvesting your own food, improving and beautifying your natural surroundings—all of these outdoor activities increase our natural vigor and provide effective exercise.

Walking to our jobs or to the marketplace instead of driving provides valuable exercise while at the same time saving us money and conserving energy.

Performing our daily chores such as cleaning or sweeping at a fast rate of speed can turn a moderate work pace into a workout.

How can you determine how vigorous and effective your normal daily activities are?

One way to determine the vigor required for an activity is to measure how many calories of energy are expended if that activity were done for an hour. For example, a moderate walk burns around 200 calories per hour, while a steady jogging run can use up to 500 calories or more in the same time. The following chart will give you an idea of how strenuous some of our daily activities, athletics, and exercises can be:

Activity	Calories Expended Per Hour
Sleeping	60
Sitting and reading	72
Sitting and eating	84
Sitting and knitting	90
Sweeping	102
Desk work	132
Playing the piano	150
Scrubbing floors	216
Walking (moderate)	216
Bricklaying	240
Ironing	252
Bowling	264

Swimming (leisurely)	300
Walking downstairs	312
Carpentry	408
Farmwork in a field	438
Mowing the lawn	462
Skiing	594
Handball	612
Running	630

Of course merely burning up calories is not the point of exercising, and this chart should not be used to equate various activities. (For example, ten hours of sleeping at 60 calories per hour is *not* equal to one hour of jogging at 600 calories!)

What you can learn from the above chart is that normal daily activities can vary a lot in the amount of vigor that they require to complete. By selecting more and more of the more strenuous activities as part of your normal daily routine, you're getting more exercise into your life.

As you look for ways to turn your normal daily activities into mini-exercise periods, you'll discover more and more chores that can be done vigorously and with beneficial results.

As Dr. Shelton reminds us, "The total activities of the day, and not merely the short time spent in formal exercise, are involved in the development of the body; hence it is important that all activity be performed correctly and with a view toward improving the total organism."

3. Formal Exercise

No matter how good we become at including vigorous activities into our normal job and other daily routines, a formal exercise program is still an absolute necessity for radiant health.

This is where the difficulties begin. People resist making changes in their lifestyle, especially changes that may take up more time and require concentrated and dedicated physical effort. Mention to an overweight and sedentary adult that he or she will have to start running and lifting weights for an hour-and-a-half starting tomorrow and you'll probably lose a client.

Sudden changes in a lifestyle can be difficult, and even moreso when formal exercise is viewed as hard work or distasteful. The first step is always the hardest, so it may be wise to adapt a sensible approach when either you or one of your clients begins making regular and formalized exercise a part of the daily routine.

Fortunately, there is an easy way of introducing exercise and vigorous activity into everyone's normal lifestyle. It's something that most people start doing after the first few months of life: walking.

3.1 Walking: The All-Around Exercise

Perhaps no form of exercise can be so universally recommended as a good brisk walk. Walking may be done safely by people of all ages and in all states of health. It requires no special equipment or location, and is completely benign in its effects.

More importantly, walking is an exercise that can be worked into everyone's lifestyle, no matter how busy the schedule. Walk to work, walk to the store, walk to a friend's home, walk around the block, through the neighborhood, and across town. There is no other form of exercise that can be so safely and easily integrated into one's daily activities as the occasional walk.

For walking to be an effective form of exercise, generally an hour or more each day is required. This hour may be worked up to by splitting the time into two thirty-minute periods, three twenty-minute sessions, or even four fifteen-minute outings if the person is old or out of shape.

Unlike other forms of exercise, walking may even be engaged in right before or after a meal. Indeed, studies have shown that a walk after a meal aids in controlling the weight.

Although even slow and leisurely walking will have some beneficial effects, a brisk walk done at a fast clip will provide more benefits in a shorter time. "Speed walking" or race-walking (which is actually an Olympic event) can yield the same results as jogging for the same length of time and at a considerably less chance of foot or knee injury.

Walking not only benefits the legs and lower body, but it actually strengthens and firms the body, expands the chest and lung capacity, and corrects the posture from top to bottom. Chronic neck problems, including whiplash, have been gently corrected simply by regular and lengthy walking.

Yet for all the benefits of walking, few people make it part of their regular lifestyle. The automobile saves us time, but at a cost to our well-being. Any daily trip which is less than one mile should certainly be walked instead of driven. If you live within five miles of your job, then you may profitably walk to work by simply leaving your home 45 minutes to an hour earlier.

In Europe, walking vacations are quite popular. Each day you walk fifteen to twenty-five miles, seeing the sights as only you can on foot, and then resting in the evening at a hotel.

Primitive man was basically a walking, food-gathering creature. He migrated north to south, south to north, during the fruit-growing seasons, walking from berry bush to fruit tree, eating, moving, and receiving nourishment and exercise from his natural surroundings.

Not only may walking be used in a regular exercise program, it can also be part of an overall, health-restoring lifestyle. Consider the story of Milton Feher of New York City:

"I was a dancer whose career was smashed by arthritis in the knees. An eminent orthopedist explained that I would never be able to dance again because cartilage in my knee had been destroyed through excessive ballet jumping. More than 20 chiropractic treatments made no difference. Nineteen injections failed to relieve me of my constant pain.

"I was a sorrowful ex-dancer as I hobbled miserably in Times Square one day, thinking of my dancing career that had been stolen from me. As I shuffled about, each step drawing pain, I started to pull my body up into a straight posture. I consciously aligned my body from neck to foot, relaxed, and then walked very purposefully in an erect manner, without tipping my head or trunk side to side.

"I felt no pain in my knees! As soon as I slumped or let my posture go, the pain returned with each step. For the next three years, I walked, walked, walked, all the time maintaining the best erect posture possible, yet without tension or strain.

"Now 15 years later, I can run 9 miles in the morning and lead vigorous dancing classes in the evening. The main source of my constantly-increasing strength is a continuous improvement in the effortless straightening of my posture by devoted, regular walking for hours at a stretch."

There is no doubt that walking is an excellent corrective, as well as preventive, exercise. "I'd be out of business within a week," a chiropractor once told me, "if everybody would throw away their car keys and just walk. Almost all the complaints I see are from people who are too sedentary. Walking is the most natural way I know of adjusting and realigning the spine which obviates the need for manipulation."

Let's look a little closer at how daily walking as part of your lifestyle can not only strengthen you, but also improve the posture and tighten the abdomen.

Modern man developed his erect posture because he is a walker. Primitive man was round-shouldered, short-necked, and his head jutted forward, ahead of his feet. Through thousands of years of walking, man's spine and posture was gradually straightened.

When walking is neglected and is no longer part of your daily lifestyle, the posture is the first to go. As a person sits more and walks less, the head droops forward and pulls the spine with it. This slumping is then accelerated by gravity, and you become round-shouldered, hunched over—much like the primitive caveman who once scampered on all fours.

Another side effect of neglecting walking and hence developing poor posture is that the abdominal muscles become weakened. Walking is an excellent "tummy tightener." The abdominal muscles are attached to the entire lower border of the front of the chest. They cover the entire abdomen and are attached to the upper border of the front of the pelvis. When they are strengthened and in good position by years of proper posture and regular walking, they prevent the organs in the abdominal cavity from slipping and sliding forward. The more they protrude, the weaker they grow as the muscles become stretched permanently. Strong abdominal muscles, insured by regular walking, hold you together to be more graceful, skillful and stronger in all activities.

Regardless of the exercise program you now follow, walking should be a part of it. And if you have yet to develop a regular program of daily exercise, walking is the easiest and most effective way to begin.

The road to health is a simple one to follow—it's only two feet in front of you.

3.2 The Three Rules of Exercise

So far you've learned how vigorous activity may be incorporated into your life through your job, your normal daily activities, and by simply making walking an important part of your daily routine. We've really said very little about a formalized exercise program, however.

To make sure that you get the type of intense activity that your body requires, it will be necessary to develop a daily exercise program. This program should become part of your daily lifestyle—something that you do without fail, just as you eat, sleep, and relax every day.

As you develop your regular exercise regimen, keep these three rules of exercise in mind:

To insure health and well-being, exercise must be

1. Progressive
2. Systematic
3. Habitual

3.3 Progressive Exercise: Setting Your Goals

Progressive exercise means that you progress from easy to more vigorous activity as your strength and capabilities increase. For example, if you start by lifting twenty-pound weights for exercise, then you

should gradually increase the amount of weight lifted so that you might be using thirty- or forty-pound weights as your strength increases. If you walk a half-mile each day, then perhaps increase the distance to a mile or two miles as your stamina develops.

For exercise to be effective, *moderate* demands must be made on the body. Since a healthy body responds so well to exercise, you must gradually increase the time and effort spent for each activity. On the other hand, do not make the mistake of thinking "a little is good, so a lot is better."

Dr. Herbert M. Shelton has observed that: "Progression in exertion should keep pace with the increasing strength and vigor of the body; it should be made step by step and not by leaps and bounds. Excessively prolonged exercise can be almost as injurious as violent exertion."

When we develop our lifelong exercise program, we must allow for progression. We must set and reach new goals. We must make sure that our daily exercise program allows for change and progress and that we do not become locked into the same routine series of activities that present no new challenges. At the same time, we must make sure that our beginning exercise program is not, overly ambitious, otherwise we may become discouraged or extend ourselves past the current limits of our capabilities.

To help you begin and plan a vigorous activity program, you should first determine your own maximum heart rate. You don't want to push yourself past this maximum rate; at the same time, you want to make sure that you are exercising intensely enough to raise your heartbeat rate to within a high, safe range of that upper limit.

The accepted formula for figuring out your own maximum heart rate is to subtract your age from 220. If you are 60 years old, then your maximum heart rate would be 160 (220 minus 60). If you're eighteen years old, then your maximum rate would be as high as 202. You can measure your elevated heart rate by first performing a few minutes of vigorous activity and then counting your pulse rate at the wrist or simply feel your heart beat and count the beats for one minute (or more simply, count the number of beats for fifteen seconds and then multiply by four).

For safety's sake, some physicians recommend that you stay within 60 to 65 percent of your maximum heart rate when doing vigorous exercise. For a sixty-year-old, this would mean a pulse rate of about 96 beats per minute. On the other hand, Dr. James A. Blumenthal of the Duke University Preventive Approach to Cardiology says that his older heart patients often safely reach 70 to 85 percent of their maximum rate.

Regardless of the upper limit you choose (60 to 85% of your maximum heart rate), you should work up to it gradually in a series of progressive exercises. Each week, extend the program either in time or intensity so that a slightly higher pulse rate is reached at the end of a vigorous exercise set. Remember that we are not in a race to health, but we should always feel that we are making a steady, strong progress in our daily exercise.

With the rule of progression in mind, we should devise a daily exercise program that will allow for either increasing periods of time or intensity of effort while at the same time taking care not to be overly ambitious or unrealistic in establishing our goals.

3.4 Systematic Exercise: The Body as a Whole

The second consideration in planning a lifestyle that includes vigorous activity is that the exercise chosen must be *systematic*. Systematic exercise is simply an activity that conditions all areas of the body. For example, a combined program of running or walking along with weightlifting and bending and flexing exercises is a collection of systematic activities that call upon every muscle in the body.

Too often people choose only a single favorite form of exercise or sports, such as swimming or tennis, and use it to the exclusion of all other exercise activities. There is a danger in this because it is rare that any single form of exercise activity will provide the full range of movements that is needed to condition the entire body.

"But I like bowling! It's good exercise because I can do it in the winter as well as the summer, and lifting that heavy bowling ball and tossing it down the alley sixty or seventy times a day gives me a good workout." The elderly woman was defending her favorite form of recreational activity—bowling—as sufficient exercise.

"But look at the muscles you use in your game," I responded. "You use only your right hand and arm to wing and release the ball, you go through the exact same range of limited motion, and the only parts of your body that get a workout are a few muscles in one arm and on one side of your body. Bowling is fine for recreation and relaxation, but it cannot qualify as an all-around life-long exercise activity. Now if you jogged down to the bowling alley each day with your bowling ball..." I began to joke.

She got my point. We must carefully select the exercise program to complement our other daily activities and work. As Dr. Shelton urges: "The exercise program should include movements that counteract the deforming tendencies of our daily work activities while at the same time exercising the unused portions of the body. Most of our sports, our different forms of work, and almost all of our daily activities are so one-sided and specialized that we become misshapen and underdeveloped."

To make sure that our daily exercise program is systematic, a few rules should be observed. First, there must always be at least a fifteen- to thirty-minute period of vigorous conditioning, aerobic activity. This would include such exercises as jogging, brisk walking, intense swimming, fast bicycling, even repeated stair climbing or hill hiking. Whatever the exercise may be, it must make the heart beat faster, the pulse increase, the breathing deepen, and the entire metabolism quicken. This pace should be maintained as long as comfortable, with an eventual goal of twenty to thirty minutes or longer. In the beginning, work up to such intense activity gradually. Increase your speed and time as your body responds favorably.

Second, there should be a period of exercise that stretches the many unused muscles of the body. Back bends, leg stretches, pull-ups, sit-ups, neck rolls, and twisting are essential for a well-rounded exercise program. An excellent series of such all-around exercises may be found in Dr. Herbert Shelton's book *Exercise!* Such exercises should be selected to balance out other daily activities and other exercise programs. For example, students and writers who bend over a desk all day should make sure that back bending exercises are used to compensate for the forward, stooped-over position assumed while reading or writing.

People who choose to run or walk as their primary exercise should also include a sequence of exercises to work the upper portion of the body, such as weight-lifting or a racquet sport.

Third, there should be a final sequence of exercises or daily activity that requires coordination and balance. Many sports and recreational activities require hand-to-eye coordination, such as hitting a baseball, tossing a horseshoe, or even bowling a strike. While this type of activity does not provide the conditioning that vigorous exercising such as jogging delivers, it does help to relax and balance the mind. This group of exercises include most sports and athletics which, while fine ways to relax and play, should always be used in tandem with concentrated vigorous activities. Gardening, too, like sports and athletics, may also be classified as a relaxing and balancing form of exercise and activity that may be used to complement an intensive daily workout.

Using these three criteria, what might a daily program of exercise look like? Here are two Life Scientist's approach, one is a young man of twenty-four; the other is a sixty-seven year old woman:

3.5 Sample Exercise Regimens

Male, 24 years

Monday - Wednesday - Friday
Jogging/Sprinting (mornings) - 45 minutes
Weightlifting, upper body - 30 minutes

Tuesday - Thursday - Saturday

Swimming (summer)/Bicycling (winter) - 30 minutes
Weightlifting, lower body (Thursday/Saturday) - 30 minutes
Racquetball (Tuesday & Saturday) - 30 minutes

Sunday
Soccer League Game - 90 minutes

Every Day
Warm-up and Morning Flex-stretching - 15 minutes

The above exercise program yields approximately one-hour-and-fifteen minutes to one-hour-and-a-half of activity per day. Notice that each day Usually contains activities that build both strength and endurance. In addition, he follows a daily stretching routine in the morning which incorporates selected exercises from Dr. Shelton's series of recommended exercises from the book *Exercise!*. The racquetball games build upper body strength and coordination, while the weekly soccer game provides lower body conditioning. He usually breaks his exercises up into a morning and evening set of activities, about thirty minutes or so in length.

Female, 67 years

Monday - Wednesday - Friday
Brisk walking (mornings) - 30 minutes
Walking/Hiking, slowly (evenings) - 45 minutes

Tuesday - Thursday - Saturday
Gardening; digging, hoeing, weed pulling - 2 hours
Swimming (summer) - 30 minutes
Moderate walking (winter) - 30 minutes

Sunday
Bowling - 90 minutes

Every day
Stretching, yoga, sit-ups - 20 minutes

An exercise program for an older person must be somewhat different than for a young person. Walking is used more as a form of exercise, athletics are not emphasized, and such recreational/outdoor activities as gardening are highlighted. Notice, however, that a full hour to hour-and-a-half of time is still allotted for moderately-vigorous activity that will use all the muscles in the body.

Whatever exercises you choose for yourself, always keep in mind that for a program to be truly effective, it must include vigorous activity that calls all of our muscles into play. It must affect the body as a whole; it must be systematic, thorough, and responsive to all the needs of the body, neither over- nor underdeveloping any part of the body to the detriment of the entire organism.

3.6 Get The Habit!

Remember that an exercise program should be *progressive*, *systematic*, and *habitual*. Perhaps that most important of these three for an insured successful exercise regimen is that it be habitual. If you make vigorous activity a daily habit, then you're sure to make progress and eventually exercise the entire body. On the other hand, if you don't perform your exercise set on a day-to-day basis, then it doesn't matter how difficult or thorough it may be.

The only way to devise a lifestyle that includes vigorous activity is to exercise at a *fixed* time each day. It may be in the morning before breakfast or at night before bed or even during your lunch hour. The important thing is that you schedule your vigorous activity at a standard, regular time and then do not deviate or make excuses.

Most people find the early morning hours to be the best time for regular exercise. By doing your

exercises the first thing in the day, you can't ignore or postpone it, or conveniently "run out of time" later in the day. The most common reason an exercise program fails is that a person will skip it "for just one day" and then for two days, and three days, and finally he's no longer exercising but simply making up excuses.

If you make a firm promise to do some sort of exercise *every* day and at a *regular* time, then it will be more difficult to put off. "Lack of time," writes Dr. Shelton, "is perhaps the most frequently-used explanation for avoiding exercise. Yet women may spend more time each day applying makeup than it would take to get some significant exercise, while men feel that it's more important to read the sports section of the newspaper than it is to actually be active and vigorous."

Lack of time is always cited as the excuse for not making exercise a regularly-scheduled part of the day's activities. No one, no matter how "busy" or important, cannot afford to make a small amount of time for so vitally an important an activity. Even the presidents of the United States, who certainly must be counted as among the "busiest" people in the world, find time in their packed schedules for regular exercise.

If you truly feel that your day is already so filled that you can't exercise on a regular basis, then try these tricks to get more quality time into your life:

1. Get up thirty minutes earlier, or go to bed thirty minutes later. Use that extra half hour or hour at the beginning and end of the day for your own exercise period. The vigor and energy that such exercising provides will more than adequately compensate for that lost thirty minutes of sleep.
2. Skip breakfast or lunch, and eat a piece of fruit later in the day in place of one of these meals. Use this meal time period as an exercise period instead. (Isn't it funny that the same people who say they have no time for exercise always manage to make time for a full three meals a day?) Vigorous activity actually delays hunger since it brings fuel from the liver into the bloodstream, and you'll soon discover that a lunch hour spent exercising leaves you more invigorated than if you ate a heavy meal.
3. Keep an hourly schedule of what you do each day. Write down *everything*. Do you spend an hour watching news on television? Thirty minutes shopping? Ten minutes driving to the store? Write it all down. Now look and see how much time/you're actually "wasting." You will have no difficulty finding an extra thirty minutes to an hour each day that could better be used by exercising.

People who say that they have no time for exercise are not thinking logically. If you exercise regularly, you'll live much longer and have years of added time to your life.

Exercising doesn't take time away; it gives you more time, better health, and a higher quality of life.

Besides lack of time, another obstacle to overcome in making exercising a daily *habit* is inertia, or just getting started. Kelly Kessing, a fitness and nutrition specialist in Philadelphia, has her own strategy for overcoming inertia.

"You've got to seduce yourself into going out there," she says. "For instance, if the idea of walking or running intimidates you, just don't tell yourself that you're going for a walk or jog. Don't pressure yourself. Put on your sweatsuit or walking shorts and a pair of comfortable shoes. Just say, 'Maybe I'll go for a walk or take a short jog, or maybe I won't.' Then just go outside to a park and start to saunter about. Maybe pick up the pace, and before you know it, you'll have slipped all the way into full-fledged exercise without feeling that you had to force yourself."

Another approach is to make a firm commitment to yourself. Write a note on your calendar or write on a piece of paper that "I will start my exercise program on Monday at 8 a.m." Then keep that promise as if it were the most important appointment in your life, because it is.

Another trick that some people use to make exercising a regular daily habit is to penalize themselves if they miss a day on purpose. For example, one Life Scientist has this unusual method to make sure he

keeps his exercising promise:

"I have a jar at home that I stuff a $5 bill into for every day that I skip exercising. At the end of that month, I take whatever money is in the jar and send it to the American Cattlemen's Association. As a vegetarian, this is the one group that I would hate most to support. So you see, I'm blackmailing myself. If I don't exercise, the only people who profit are the meat-producers. They've only gotten $10 from me this year. Any day that I think about blowing off my exercise, I think about giving my hard-earned cash to those days, and it always gets me out of bed."

So whatever it takes—promises, schedules, or blackmail—make sure that your lifestyle includes the regular vigorous activity that you need for superior health and well-being.

4. Questions & Answers

How do I know if I'm getting enough vigorous activity in my life?

> You should perform some activity that requires a concentrated effort of both mind and muscles. You should be breathing deeply, your heartbeat should be accelerated, and you should probably have a light film of perspiration, even in cool weather. You should experience this "conditioning" effect for at least ten to fifteen minutes, and preferably twenty to thirty minutes. After a vigorous activity is completed, you should still be in a state of accelerated metabolism (moderate heart and pulse beat, slightly deepened breathing) for another five to ten minutes
>
> As a practical rule, if you have difficulty sleeping at night, experience constipation, or feel continually fatigued and lacking in vigor, then you may also be sure that you probably are not receiving enough vigorous activity.

I'm fine on any exercise program—for the first two weeks. Then I find myself making excuses and finally I'm hack to where I started, a weekend athlete. Any suggestions?

> This is why it is so vital to make exercise and a vigorous activity period a *normal* part of your life—not simply something that you add to your day or do when you have "extra" time
>
> The most effective way to get exercise into your life—and make it stay there—is to do it as soon as you get out of bed. Before you eat breakfast, before you go to work, before you wake up the kids or read the paper, go and exercise
>
> If you make exercise an essential part of your daily activities, at the beginning of the day, then you won't start to skip it. Most exercise programs fail because people try to work it into their schedules. Instead, revise and start a brand-new schedule. Treat that morning (or evening) exercise period as something you *have* to do; it's not an option, but a necessity
>
> You may have to be a little compulsive at first, and really(exercise your willpower and self-discipline. Reward yourself, punish yourself, but promise yourself that the time you have decided as your exercise period is sacred and will not be sacrificed according to whim or any other superceeding responsibility.

Article #1: Exercise: A Hygienic Perspective by Ralph C. Cinque, D.C.

That daily exercise is essential to develop and maintain good health is one Hygienic principle upon which there seems to be universal agreement. Even the medical profession encourages regular exercise as a means of prolonging youthfulness and promoting cardiovascular well-being. The overall merits of regular exercise are fully recognized, and we have no need here to further expound upon them.

However, there exists a great deal of confusion regarding the relationship between exercise and health. Many people equate health with physical conditioning. The classical American model of male health is represented by a robust well-muscled physique, with erect posture, great strength and power. Without necessarily deriding this ideal, I must insist that it is not synonymous with health. There is not always a direct proportion between the level of physical conditioning and the level of overall health. Physical conditioning is only one aspect of health. The best athlete is not necessarily the most healthy. The one who runs ten miles is not necessarily in better health than the one who runs only five, or one, or for that matter, none at all.

I once overheard a well-developed body builder relate to his companion that he was subject to occasional episodes of gout. Every few weeks one or the other leg and foot would swell up and produce agonizing pain. He would be crippled for days at a time and would have to resort to large doses of aspirin and other pain killers in order to obtain relief. This incident made a tremendous impact on me because this particular body builder had an absolutely splendid physique. His muscular development, his posture, his body weight, his carriage, his symmetry, and his proportions were virtually ideal. He had the physique of a Greek god. By all popular notions, he was a picture of health. Yet, it should be obvious to the readers of this article that his health was far from perfect. Gout does not develop without causes, and being well-muscled does not lessen its implications or severity. How ironic that in the process of building an admirable outward condition, he built a morbid internal condition. It is likely that his interest in body-building prompted him to follow a high-protein diet and to use protein supplements, liver extracts, etc., and that these practices were mostly responsible for the development of gout.

Although it is true that those who engage in regular physical activity achieve greater longevity than those who are largely sedentary, it has not been shown that superb athletes achieve greater longevity than those of moderate ability. With the exception of cardiovascular diseases, the incidence of degenerative diseases among athletes (such as cancer and arthritis) is approximately the same as for nonathletes. Lou Gehrig died of amyotrophic latoral sclerosis. Babe Ruth died of cancer. There have been many outstanding athletes who have died tragically of crippling diseases.

Acute diseases are equally as common among athletes. Many an athletic contest has been postponed due to colds and flus. Tennis star Jimmy Connors was recuperating from a month long bout of mononucleosis right before the last Wimbledon tournament, and some have suggested that this was a factor in his loss to Borg.

Despite strong evidence to the contrary, the popular notion, today, is that exercise will insure us against disease. We are told that as long as you run every day, you can eat all the fatty meats you want and not develop atherosclerosis, for the running will keep down blood cholesterol and prevent arterial plaquing. We are told that playing tennis regularly will enable the body to "burn up" the caffeine and other toxic alkaloids of coffee and cola drinks, so drink all you want. Regular exercise will keep down blood pressure, so why cut out salt? Exercise diligently, perhaps excessively, and ignore every other aspect of Hygiene. That is the advice we receive from many of the "experts."

As Hygienists, we must stress the fact that exercise does not insure against disease and it does not remedy disease. All it can possibly do is supply the body's need for activity. If the individual who exercises but ignores proper diet, fares better than the one who neither exercises or eats correctly, we can

account for this by recognizing that the latter ignored two life essentials while the former ignored only one. Exercise does not undo the effects of dietary abuses, but a lack of exercise may compound the effects of dietary abuses.

The body has physiological needs that can only be met through vigorous physical activity. The development of muscular strength and endurance, a powerful heart, great respiratory capacity, vibrant circulation, thorough lymphatic drainage and superb neuromuscular coordination all require the influence of regular exercise. However, from the standpoint of overall health, there is a limit to the amount of good that the body can derive from regular exercise. The body's actual physiological needs for exercise are not as great as some people believe. We do not have to become marathon runners in order to avoid cardiovascular disease. One can achieve high-level health without ever developing outstanding athletic capabilities. Of course we have no objection to vigorous physical training and we recognize that it is the only way to enhance performance. Possessing great strength, speed and endurance is practical and desirable even if it doesn't guarantee great health or longevity.

Vigorous exercise entails a tremendous energy expenditure. This expenditure is compensated for in the physiological benefits that we derive from exercise. The amount of energy that we can safely expend in physical activity depends upon the level of our overall health and vitality. The invalid, who is in great need of rest, can only engage in brief and mild periods of exercise without enervation. The seasoned athlete, on the other hand, may be able to perform amazing feats of strength and endurance without dissipation. It is difficult to designate arbitrarily what constitutes excess in the realm of physical activity because individual factors are the most important considerations. What is excessive for one person may be unproductive for someone else.

The initial effect of exercise is to deplete the body. The secondary and lasting effect, however, is to strengthen and build the body. This occurs while resting as the body prepares for future episodes of activity. Exercise must be vigorous in order to be effective. Slow walking, sauntering along on a bicycle, casually twirling the extremities—these activities are of little value. Subjecting the body to stress (within reasonable limits) is what exercise is all about. Exercise must be invigorating, strenuous, challenging and taxing in order to occasion dynamic physiological changes, only by placing great demands upon our bodies can we acquire great strength and stamina.

A short period of vigorous activity is more beneficial than a long period of mild activity. A short, but hard run will build greater power than a long, slow jog. It is also less depleting. Lifting a heavy weight a few times will build greater strength than lifting a light weight many times. A good exercise regime will provide for both endurance (the ability to sustain an activity over a long period) and strength (the ability to overcome resistance in a single instance), as well as speed and agility. A well-known jogging expert advised a woman recently to run slower in order to increase her jogging distance to ten miles. My advice would have been just the opposite, that is, to run a shorter distance harder, thereby, deriving greater physiological benefits and less profound exhaustion.

Determining the best manner in which to train depends upon what one's objectives are. The person who is exercising for general health and fitness will have different goals than the one who is trying to achieve excellence in some particular sport. Obviously, one can only become a great long-distance runner if one habitually runs long distances. One can only become a great cyclist if one cycles regularly. Great swimmers become so only by putting in many hours in the pool. Developing outstanding capability requires participation far in excess of the body's physiological needs for activity. However, expenditures of this kind can be made without depleting the body as long as the individual gradually subjects his or her body to greater stress, and makes a point to secure enough rest and sleep to fully compensate for the added exertion. For example, one could not attempt to run long distances (30 to 40 miles per week) while going to school full time and working (as I once tried to do). It is possible to become progressively more enervated even as one's level of conditioning improves. However, for the individual with a less-hectic schedule, who is able to rest 9 to 10 hours every day, such a running program may be entirely constructive.

Unfortunately, many runners do overexert themselves of effects of excess vary from mild to severe strains and sprains. Pronounced physiological depression marked by weight loss, loss of libido, insomnia, amenorrhea in the female, and digestive disturbances have resulted from an overly-strenuous training schedule. These problems are usually resolved easily by securing more rest and curtailing one's activity. In some instances, too rapid progression is found to be the crux of the problem.

Which activities are best from a Hygienic standpoint? As always, we refer the argument back to Nature. Those activities that conform with physiological principles relating to joint motion and body mechanics are most desirable. Formal exercise is really just a substitute for natural activities that we would perform in a state of Nature. All natural activities require total body participation. When we run, jump, climb, swim, etc., our bodies are acting as a unit, even though certain muscle groups may be playing a predominant role. Such activities not only strengthen and condition us, they enhance body energy, coordination, balance and freedom. By entailing a fluidity of motion, these activities enable us to avoid excessive strain and tension. In contrast, activities that entail rigid postures, isolated muscular efforts, and limited ranges of motion, may have the opposite effect, that is, to increase tension and to stress the joints and muscles.

Perhaps running is the most natural human activity, like deer, human beings are running animals. We are capable of running great distances smoothly, effortlessly and efficiently. Certainly we are not aquatic animals and bicycles never grew on trees. Team sports are popular because of cultural influences, not biological inclinations. Running is considered to be the most superb exercise for strengthening the heart, lungs and circulation. It is not necessary to run great distances in order to derive these physiological benefits. Running 2 to 3 miles every other day is fully adequate to achieve optimal cardiovascular conditioning. Those who wish to run greater distances can do so, but no one should feel compelled to run longer than this for health reasons. Running sprints, running up hills, running up stairs and other variations are likely to be of greater value than just jogging. Running alone is not adequate for good conditioning. Such activities as vigorous calisthenics, weight training and gymnastics round out an exercise program that includes running. This is particularly important in regard to developing the upper torso and extremities, which are largely undeveloped by running.

When is the best time to exercise? Again, we must apply Hygienic reasoning. Eat when you are hungry. Drink when you are thirsty. Rest when you are tired. So it would follow that you should exercise when you feel vigorous. It is a mistake to use exercise as a stimulant, to perk ourselves up through exercise when our bodies are actually calling for rest and sleep. A feeling of relative vibrancy should precede and occasion our workouts and not vice versa. If we feel languid, we should rest until our energies have been recuperated to the point that we feel like becoming active. If you happen to feel all washed out on any given day, it would be unHygienic to force yourself to exercise in spite of it. Just as we can rouse up an appetite by eating, even in the absence of hunger, so too can we rouse up a feeling of invigoration by exercise, but the latter is just as artificial as the former. Get in tune with your body and seek always to supply your body's needs as they fluctuate in the course of daily life. There is really no best time to exercise, just as there is no best time to eat. Some mornings I feel inclined to start running right out of bed, and I do so. Other mornings I feel no such inclination, so I postpone or cancel my usual run. Learn to live with a flexible schedule in regard to exercise, and for that matter, all aspects of Hygiene.

Can a person attain great athletic ability eating fruits, nuts and vegetables? The answer is a qualified yes. I was introduced to Hygiene by two brothers, both in their 30s, who had been Hygienists for many years and who were excellent runners of marathon caliber. Eating Hygienically lends itself to greater athletic achievement, particularly in endurance activities. A high-alkalinizing diet, composed largely of fresh fruits and vegetables, enhances one's oxidative powers and one's ability to sustain muscular effort. On the other hand, such a diet promotes rather slender body build. I have never met a raw fooder with a "Charles Atlas" physique and doubt that I ever will. For one thing, the diet is too low in protein. Secondly, raw vegetable foods do not stimulate anabolism the way cooked foods do. Yet, lean muscularity may be closer to the biological norm for physical development than the immense size that we generally associate with classical body-building. It is unlikely that human beings in a state of Nature,

living on the spontaneous products of the trees in a gentle climate, would tend to massive physiques. Peoples throughout the world who are known for achieving great longevity tend, as a rule, to be rather slender. Keep in mind that I do not object to weight training or body building, but only to the excessive bulkiness that many weight lifters develop.

Many Hygienists are too thin and underdeveloped. In most cases, barring pathological causes, this is the result of an overly-restrictive diet, both in regard to quantity and variety of food and to inadequate physical training. In all fairness, however, we must recognize that the paucity of outstanding athletes among Hygienists is due mostly to the paucity of Hygienists. Yet, Hygiene has not been without its talents. Among our practitioners, for example, Dr. Sidhwa is a first-rate long-distance runner. Dr. Burton is a prominent cyclist in Australia who competes regularly in grueling races. Dr. Benesh is a veteran physical culturist, who, at the age of 67, engages in weight training, running and vigorous calisthenics. The last time I visited him he said apologetically that he was running only six miles a day, but added quite candidly, "I try to take it at a fast clip." Dr. Shelton, himself, was an outstanding weight lifter and had a rugged build that matched his personality.

What role does exercise play in the recovery of health? I believe that it plays a greater role than some Hygienists think. Unfortunately, many Hygienists are preoccupied with food and fasting. To them, life is one great cleansing. They live from one fast to the next one. Or they consume themselves in concerns over food in between. Purification becomes their greatest goal in life, elimination the ultimate purpose in living. They fail to see fasting for what is is—a temporary expedient that enables us to secure a foundation from which to build ourselves. The only contests they wish to enter are fasting marathons.

They never give their bodies a chance to enter a building phase. They deny themselves, by their imbalance, the opportunity to grow, to develop a physique, to acquire great strength, speed and endurance. Instead of practicing Hygiene so as to live, they live so as to practice Hygiene—a most unHygienic endeavor. It is no wonder that such individuals remain weak, puny and pedestrian in their lives.

Among feeble children, particularly, I have found exercise to be of greatest importance in building vigor and promoting growth and development. Those with weak digestion can derive much benefit from engaging in vigorous physical workouts. The role of exercise as promoting recovery in tuberculosis, and other respiratory problems, is well known. Exercise strengthens not only our muscles, but our entire organism, including our minds. It is possible that exercise has a more profound effect upon the organism than any other single Hygienic factor.

Article #2: Exercise: What Most Of Us Forget

Exercise is defined by *Webster's New World Dictionary* as "activity for developing the body or mind." The average American has little difficulty meeting the latter but finds less and less time for the former—*developing the body*.

Day-to-day living develops the mind. Academician or laborer, wide-eyed child or wise old man, housewife or career woman, all of us are tested day in, day out with exercises for the mind. All the yesterdays of mental exercise, coupled with today's, strengthen and develop the muscle between our ears.

Whether subtle—reading periodicals, listening and watching the news, solving routine problems at work

and at play—or applied, such as the efforts to become a better chess player by studying the masters of the game, our mind gets more than enough exercise daily. It is a natural activity for all of us.

Activity to develop our bodies, on the other hand, is not wholly natural. Although the body is in natural, constant activity throughout the day—even in sleep—vigorous activity needed by the body's circulatory system, its lungs and its muscles requires our willing commitment. No matter how old or in what state of health, there's a healthy form of exercise for nearly everyone. And an effort should be made by everyone to find that right exercise to develop the body.

If you, the Natural Hygienist and Life Scientist, are following the rules for natural health—a Hygienic diet, sufficient rest and sleep, occasional supervised fasting and the proper amounts of sunshine and pure air and water—then a regular exercise program is a must.

Why is regular exercise so important? A long-standing, inactive body becomes sluggish. Bodily functions are greatly impaired and reduced. If you suffer from chronic fatigue, poor sleep, digestive disorders, shortness of breath after little exertion or poor posture (just to name a few symptoms) you are not exercising your body. You are depriving your body of the energy that it needs to properly maintain its natural, healthful functions.

Reasonably vigorous exercise builds up the energy reserve our bodies need now more than ever in today's fastpaced living. Taking appropriate and sufficient exercise daily keeps that energy reserve at its peak. The key to maintaining energy and maximum health is your blood circulation, both arterial and capillary. Without exercise, circulatory fitness is not possible.

Studies show that at age 25 blood flow has decreased 40% and decreases 60% by age 35. From an energy-level standpoint, then, the average American is middle aged at age 26 and all because we are sitters, we Americans. We sit on our way to work, at work and spend a major part of our free hours sitting, engaging only in a minimum of activity. Our endurance and stamina is stagnant as compared to primitive peoples who, all day long, lift and push and climb and more importantly, walk and run.

Regular exercise, then, provides us with a stronger heart and lungs, increased metabolism, better digestion, good sound sleep, the elimination of a multitude of physical ailments and especially with the energy to overcome stress. The question now is, what exercise is best for you.

First, find out how much exercise you can engage in by getting a proper physical. In some cases, it may not be possible for you to exercise at all. But that is a rare occurrence. Once you have determined how much you can exert yourself, your choices are many.

Walking, certainly, is the easiest and the least thought of form of exercise we can all do easily. A short series of calisthenics, cycling, jogging, dance exercises, isometrics and progressive resistance programs at health clubs are other choices. Swimming, tennis, volleyball and golf are others. Yoga and martial arts disciplines from the Far East have a growing following in the United States, too. Whatever you choose as your form of exercising, there are some basic principles that you'll need to follow.

To be of any real value, your exercise should be a daily ritual, systematically performed. Mornings are the best times to engage in your physical activity and when your body needs it the most. A safe beginning is two to three sessions per week the first month and three to four the second month. Thereafter, as your strength increases, you can exercise more frequently.

Set aside at least 45 minutes each day for your exercise, allowing for a warm-up each time and a slowdown toward the end of your period. Take short rests during your sessions. Most of all, *discover* what works best for you. Exercise on an empty stomach is ideal. After meals; you should wait at least two hours.

For a well-rounded program, learn to do several types of exercise. This leads to a sustained interest in what you are doing as well as contributing to the developing strength, balance, flexibility, coordination, speed and endurance.

Remember, there is no rule that says exercise has to be hard work. Look at all of the alternatives and what they can do for you. There's a healthy form of exercise for everyone. Many of you will be content with less vigorous exercise than others, which is fine so long as you are exercising *regularly* in order to build endurance, burn excess calories and strengthen your cardiovascular system.

Article #3: Jogging And Other Vigorous Exercise

Warm Up And Warm Down

Enlivening outdoor air, trees and other natural scenery, the exhilarating feeling of aliveness: These are some of the reasons why so many folks jog as part of their exercise program. Many people like to run in the morning when they arise; others prefer the afternoon after work, before their evening meal. Dedicated joggers run morning and evening.

Whenever you run, it is probably after a period of relative inactivity. So, unless you have been physically active before you jog, it is an excellent idea to warm up before jogging. It takes only a few minutes and the results are well worth the time.

We run because we enjoy it and we know it's good for our health. Let's enjoy ourselves now while we learn why it's important to warm up before jogging: Our circulatory system has to adjust to increased physical activity. Too sudden demands on the heart and the arteries are a strain on them. When we're relatively inactive, our heart beats slowly and arterial tension is low. Sudden violent exercise can easily cause unpleasant symptoms such as a painful throbbing in the side and front of the neck.

To do their work well the muscles must contain blood commensurate with the work they must do. The more work they do, the more oxygen they need and, as you now, the (red) hemoglobin in the blood supplies oxygen o all the body cells. When at rest, most of our blood is in our body cavities (head, chest, stomach, pelvis). Our venous and lymphatic circulations are relaxed.

When we exercise vigorously, as when we jog, most of our blood will flow through the muscles at a rapid rate and at high pressure. This increase in pressure and rate of flow begins at the start of vigorous exercise. The arteries of the body cavities, especially in the stomach, constrict, while the arterioles in the muscles and the vascular area of the skin dilate. Dr. Shelton says, "Such a vast circulatory adjustment cannot be made in a satisfactory way or sufficient to correspond to the amount of work demanded from the muscles if rapid or vigorous work is thrown upon the muscles suddenly." He also says that respiratory and eliminatory adjustments are best made by increasing the intensity and quantity of muscular exertion gradually.

Shelton says, "Nor is it desirable or even always safe to suddenly cease vigorous activity while in a state of high organic activity—the heart and lungs working hard, the glands working at high speed, the skin flushed and perspiring. The race horse trainer acts wisely when he takes his horse, after the race, and walks him around a while, thus giving him exercise of progressively diminishing intensity until circulation and respiration have returned to nearly normal. Sudden cessation of vigorous activity throws as much strain upon circulatory adjustment as a sudden beginning of heavy work. It is best to decrease the quantity and intensity of muscular work gradually. Passive deep breathing may also be used to reduce organic activity."

To help you get warmed up or warmed down for exercise, here are a few exercises I saw in our local

newspaper. Try them!

1. With, your feet a few inches apart, bend down and touch (or reach for) your toes. Then stand up straight, raising your hands high above your head ... then repeat this about a half dozen times.
2. Stand with your hands on your hips and your feet planted firmly. Twist the top half of your body until one shoulder points all the way forward ... then back to where it belongs ... then the other shoulder ... then back. Stop after about 10 swings.
3. Lie on the floor and stretch your arms and legs out until you look like and "X". Raise your legs, still spread out, all the way up and back until your toes touch your fingers. Do this about four times.

Happy jogging!

Article #4: Hiking Is More Than Just Exercise by Marti Wheeler

Hiking could become your favorite form of exercise. One reason why is because walking is easy. In case you're wondering what the difference is between hiking and walking, there's really very little difference. According to the dictionary, a hike is a long walk, especially for pleasure or exercise. (Of course long is a relative term and so has little meaning unless we know long compared to what.)

At any rate, you can hike for both pleasure and exercise, among other things. Actually do not hike "at any rate". Hike at a very fast pace. Walking cannot be very effective as a form of exercise if you don't walk fast. (Fast is a relative term, too, but here we mean relative to a person's ability. For example, a person just off a long fast might consider a moderate pace to be fast.) All the muscles of the body are used in walking, though the legs obviously benefit the most. Fast-paced uphill hiking provides as much exercise as jogging on level ground.

Hiking is healthful from standpoints other than that of exercise, however. It is an excellent way to obtain lots of fresh air, as well as a nice dose of sunshine. The mental well-being that results from a brisk walk cannot be underestimated, either. Enjoyment and appreciation of your surroundings can lift your spirits and make you glad to be alive—and healthy. There is something very uplifting about the feel of a breeze or wind on the face or body.

Such wholesome recreation is just plain good for us; Hiking is recreation on many counts. The scenery can vary from houses on neighborhood streets to woodsy settings; perhaps along a creek or river, to open fields or meadows. If you are curious or adventuresome, you may want to go exploring. If you are romantic, you may want to hike with a husband, wife or lover. You may enjoy hiking with a companion, someone with whom you enjoy conversation.

If you are like many people and have less time in your life than activities you want to pursue, why not combine your exercise with your social life to make the most of your time? If you use your imagination, you will come up with many more ways to combine hiking with other pleasurable activities. Though it is preferable to walk free-handed, you can occasionally bring your camera and take photographs. You can sometimes bring a small backpack with some fruit and combine a hike with a picnic—a good combination!

One last note on hiking: It requires very little equipment and no training or special skills. A comfortable pair of hiking shoes are an asset, though running shoes will also suffice in many places. If your inner ears are very sensitive, you may find it helpful to wear earmuffs or a hat or scarf that covers your ears if

the temperature is below 65 degrees. Also, slacks, shorts or skirts with pockets are good to have. But, all in all, you will need very little equipment for hiking. You don't even need as much energy and motivation as runners must have. Yet you can sure reap many benefits.

Article #5: Developing Your Arms

Are you a weakling? Can you do more than four or five pushups, even women's (modified) pushups? For some people, doing five pushups is pushing it. They are ready to stop at four if not before. (For those of you who are unfamiliar with modified pushups, they are done from the knees instead of from the toes. Otherwise they are the same as regular pushups.)

The worst problem some people have when it comes to pushups is that they dislike or even despise doing them. But then it's not unusual for a person to dislike what they're not good at. You may want to develop your arms and upper torso without suffering, even if you're not a swimmer and dislike doing pushups. Here is a solution to this problem for weaklings who don't want to remain weaklings. Purchase a set of dumbbells, "a short bar with two identical spheres or with adjustable weighted disks attached to each end and used usually in pairs for calisthenic exercise"—*Webster's New Collegiate Dictionary.*

Start off with the lightest weights and do about five repetitions to start with. Then increase the number of repetitions in increments of five as you gain strength. You can do your weightlifting at the same time as other calisthenics, alternating between exercises for your legs, for your arms, and for your abdomen and sides so that the muscles in the various parts can rest somewhat between exercises. For example, you can lift both dumbbells from your sides, outward and meeting above your head, starting off with five repetitions and, in time, increasing to 10, then to 15 and to 20, etc. Then do 10 or 20 situps, preferably on a slantboard. So far you have exercised primarily your arms, then your abdomen.

Next lie down on your side and, with or without ankle weights strapped around your ankles, lift one leg 20 times (like scissors). Then stay in that position and lift it from your side up into the air and over your head several times. Do this same scissors exercise and dumbbell lift on your other side.

Continue exercising in this manner, and lift the dumbbells in various ways. While lying flat on your back, lift from your sides with your arms as far away from your body as possible to a meeting point over your chest. Also while lying on your back, lift from your sides with your arms beside your legs and then above your head.

These exercises are very effective, and your upper torso will develop as desired. You won't be a weakling anymore, even though your pushup ability may not improve. It will become much easier to open heavy doors, and turning the steering wheel on a car without power steering will be noticeably easier, too.

If you wonder why you still can't do pushups after using dumbbells awhile, ask yourself if you can lift 50-90 pounds of dumbbells. When you can do that, perhaps you can lift about half of your body weight with your arms more than half a dozen times—and enjoy it.